

2016-2017 Officers



William Tang
President



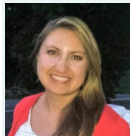
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Dan Carington
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Deanna Adkison
Treasurer

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January Meeting

Tuesday January 10, 2017

Main Meeting:

Steam Design

Tech Session:

Montreal Protocol Refrigerant
Updates

**Research Promotion/Membership
Promotion night!**

Please see **page 3** for more information.

Where:

Embassy Suites
550 Winter St. Waltham

Meal:

Classic Chicken Picatta
Lemon-Caper White Wine Sauce, Vegetable,
Rice Pilaf Cheesecake with Fresh Fruit
Compte

Time:

5:00 – 6:00 p.m. Tech Session/Social
Registration
6:00 – 7:00 p.m. Dinner
7:00 - 8:00 p.m. Announcements & Main
Program

Cost:

ASHRAE Boston Members:	\$50
Non –Members / Walk-Ins:	\$60
ASHRAE Student Members with RSVP:	Free

Special thanks to our Sponsors:

Platinum:	Gold:
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Please register online at www.ashraeboston.org.

RSVP by 12:00 PM on Friday, January 6th.

If you have any questions, you may contact Christopher Pietrocarlo, Attendance Chair, at
ashraebostonattendance@outlook.com.

Thank You



PRESIDENT'S MESSAGE

By: *William Tang*

I hope everyone had a wonderful holiday!

I want to thank ASPE Boston Chapter for hosting our December joint meeting on solar heating. At this point, we are half way through our ASHRAE calendar year. I hope you have enjoyed the programs we have put together so far. Here are some events we have lined up in the upcoming months:

- January: Steam Design
- February: Space Pressurization
Annual social
- March: Demand Reduction - Hosted by AEE
- April: Women in the HVAC Industry
Tour of Nightshift Brewery
- May: Installation of Officers
- June: Annual Golf Tournament

We have received constructive feedback from the surveys we have sent to attendees after each meeting. Your feedback is very important and will help shape future events. Please continue to email me at coo1@ashrae.net or any of the volunteers with questions, concerns, or suggestions to help improve our Chapter. If you are interested in becoming more involved, please contact me for a list of available opportunities.

Please join us at the January meeting and we will warm up this chilly weather with a topic on steam design. I look forward to seeing everyone at the upcoming meetings. Best wishes for a healthy and prosperous New Year!



Materials for the February newsletter are due by **January 20, 2017**.

Please submit employment/want ads in .pdf, .doc or .jpg format. A company logo may also be included. Feel free to send any ideas you would like to share or include in next month's issue.

For additional information, refer to our website at www.ashraeboston.org.

EDITOR'S NOTE

By: *Deanna Adkison*

For more information, please e-mail northeastaire@gmail.com

Tech Session

Title of presentation: *Montreal Protocol*

Speaker Bio:

W. Ryan Geister
Systems Leader

Ryan Geister is the Applied Systems Leader for Trane, a brand of Ingersoll-Rand. During his 20 year tenure, Ryan has held various roles supporting the Trane portfolio of chillers with increasing responsibilities. As the Applied Systems leader, he is focused on advancing a strategy to drive system solutions for customers. This includes developing tools and improving the effectiveness of the Trane selling organization by expanding systems knowledge and capabilities to influence consulting engineers and technical decision makers. Ryan serves on the Ingersoll Rand Refrigerant Strategy Committee. He has led and continues to support the Global Product Network for Trane chiller portfolios. Currently, Ryan is the chairman of the AHRI (Air-Conditioning, Heating & Refrigeration Institute) Chiller Section Committee and a member of the AHRI Board of Directors. Ryan is an ASHRAE Journal author and has spoken at annual meetings during his 20 years as an ASHRAE member. He earned a bachelor's degree in engineering from the University of Illinois, Champaign-Urbana in 1995 and a master's degree in business administration from the University of Wisconsin, La Crosse in 2000



Presentation Outline

- Learning Objectives
- World Motivation Driving Actions
- What is Driving Action in the USA?
- Global Consumption of HFCs
- Global HFC use of Refrigerants in RACHP
- World - Motivation Shaped Action
- Taking Action!
- Montreal Protocol HFC Amendment Agreement!
- Montreal Protocol HFC Amendment Details
- Global Pressure on Refrigerants Continues...
- Where were we and where are we going?
- What Actions Have Been Taken Already
- US Government Partnership with Industry
- Industry Consensus & Agreement with NRDC
- Proposed Changes to HFC Acceptability
- Final Ruling on HFC Acceptability in Chillers
- Final Rule 21: Protection of Stratospheric Ozone
- Where can I learn more?

- Review of Current and Pending Regulations
- US EPA to Tighten HFC Regulations
- Next-Generation Refrigerants
- Flammability Properties Vary
- HVAC Industry Next Transition Begins
- HFO Options for Chillers Grow
- High Pressure Replacements
- High Pressure Refrigerant Replacements
- Refrigerant Support
- Refrigerant Choices & Comparison
- What refrigerant do I buy?
- How Can I Protect My Investment?
- History of HVAC/R Refrigerants
- Support Documentation & Sources
- How do I Find Out More?
- Other References
- SNAP Ruling Documentation
- Questions

Main Presentation

Title of Presentation: *Steam Design*

Speaker Bio:

Kevin Foley

MA 1st Class Steam Engineer

- BSME – UMass Lowell
- Certified Healthcare Facility Manager
- Certified Energy Manager
- 34 Years in Steam and Power Generation:
 - Industrial/Healthcare/Food and Beverage
 - Combined Cycle – Gas Turbine and Steam Turbine
 - Cogeneration – (“waste” thermal energy is used)
 - Natural Gas, Coal, Tires, Rice Hulls, Trash

Presentation Outline

- Introduction to the Steam Property
- Steam-Reputed Pipe
- Boiler Pressure Vessel Explosion
- Steam - Saturated
 - Superheated
- Steam Table
- Steam Production
- Steam Uses

- Steam Turbine
- Steam Cooker
- Steam Venturi for Vacuum
- Steam – How It Works
- Boiler Operator License Laws
- Steam Plant Maintenance
- Steam Line Maintenance
- Steam Pipe Selection Example
- Power of Steam



BOG Meeting Minutes

By: Mark Leonard

Meeting started at 4:27 PM

General Business

- November meeting minutes were approved.
- Research Promotion has currently reached 13% of it's annual funding goal.
- A motion was approved for the Chapter to donate funds to reach 30% of the annual goal.
- Downtown Boston venues are being explored as potential event locations for informal social gathering for Officers, BOG and Committee Chairs sometime in February.
- Chapter finances were discussed.
- Articles for the January Newsletter shall be submitted to the Newsletter editor by Friday, December 16th.
- A list of potential breweries is being developed to host the April Brewery Tour.
- The Chapter discussed the status of the Chapter PAOE points along with strategies to increase the point total. Meetings with government officials or historians were noted as potential leads.
- Corporate Sponsor Appreciation night will be held sometime in April at Post 390 restaurant.
- New YEA Committee Chair candidates were discussed for next year.

December Meeting

- Joint meeting with ASPE
- Will Tang to announce annual ASHRAE discount to Sunday River and Sugar Loaf

January Meeting

- Presentation materials for both the Main Meeting and Technical session shall be submitted to Society to seek PDH approval.

Meeting adjourned at 5:16 PM



HISTORICAL NEWS

By: Eric Edman



New Year, and New Resolutions...

We are probably just like you -and have good intent to do a lot of wonderful things in the New Year. We probably fail at following thru on some, but we did promise to share a rather interesting interview with one of our very own chapter fellows. Prof. Leon Glicksman has been at MIT for quite a few years, and, for your delight- we share with you a Q&A format of our recent sit down interview.

We hope you like the format, the questions, and the answers. It is indeed an honor to “rub elbows” with so many talented people here in our chapter. The historical committee is here to listen and respond to all your ideas.

You can certainly contact any one of us.

Eric Edman
Reddy Tupcak
Thanh Huynh

Our group received some creative suggestions for historical topics.

We look forward to the ASHRAE/AHR Show in Las Vegas at the end of the month and hope you all enjoy it as well.

We always look forward to seeing you at our monthly meetings

Eric, and the committee

Boston ASHRAE Historian- Fellow Interview

Interview with ASHRAE Fellow: Prof. Leon Glicksman Oct\Nov. 2016

1. What attracted you to the HVAC field?

I was working for the Owens Corning company- on insulation products, and getting my Ph. D. at MIT in 1964. The HVAC field had a lot of room for energy conservation back at that time.

2. When did you join ASHRAE?

In 1988

3. What prompted you to join ASHRAE?

My early research on high performance insulation created a need to talk about this to the construction industry. ASHRAE had all sorts of members in the construction industry, manufacturers and researchers in this field. They were a great venue for exchange of ideas with others.

4. What was your first job in the HVAC Industry?

Initially, a Ph D student then Professor of Building Technology and Mechanical engineering here at MIT. I have been in MIT Building Number 5 for a long career.

5. Could you reflect on any issues at the time?

I felt there was big disconnect between architects and engineers on insulation and other areas of energy efficient design and operations- with little factual information on the subject. This created reasons to develop a dialogue and bring ideas about advanced technology to the A&E industries at large.

[Continued on Next Page —](#)

[— Continued from Previous Page](#)

6. Do you have any advice for a young person thinking about a career in HVAC?

This is probably THE endless open field for advancement. There are strict energy codes, and other restrictions, which have compelled us to be ever more creative which has HUGE challenges for all of us.

7. What has ASHRAE meant to you?

It is the place and format for effective exchange of ideas and knowledge. I have connections today all over the world.

8. How has it helped you grow?

The access to information and a venue to meet the leaders in the field is just the beginning. The rest is what you, as an individual, put into it. I have really enjoyed it.

9. Has anybody stood out to you as a person of significance to HVAC?

No, not really any one person. It is a group effort I believe.

10. What are your special interests?

Energy efficiency
Natural ventilation
Advanced technology
Application of ideas into low income housing
Applications in the developing world

11. Would you ever consider committee work?

I did work with TC 4.4 and 5.3. I served as research director for 4.4

12. Have you ever served within ASHRAE as an officer?

No, I have not really gotten into the local chapter affairs.

13. Could you think of any major events in HVAC affecting you?

The new proposal of Net Zero Buildings will have a dramatic effect upon all of us. The challenge is there.

14. Could you think of how ASHRAE could improve?

There is always the need for better communication between engineers, architects, developers and government officials

15. What do you feel has been the best single thing about the HVAC field?

There is lots and lots of opportunity for everyone.

16. What would you change in HVAC if you could?

There needs to be new avenues to bring new concepts in equipment, design and operations faster into practice.

17. Could you think of the top three HVAC inventions?

Well, certainly the concept of air conditioning. Also, new building envelope concepts and advanced monitoring and controls.

18. Do you any have any outside interests?

Actually, yes I do. I follow the Red Sox, the Patriots and the Cubs. I like to go looking for antiques with my wife. I have also taken up painting with water colors.

19. Please provide a short bio of your life.

Leon Glicksman is a Professor of Building Technology and Mechanical Engineering at MIT. He founded the MIT Building Technology Program and served as head for 24 years. Currently, he is leading an MIT effort to develop energy-efficient, sustainable building technologies and compatible designs in programs in China, India, Japan and Europe. Recent research is focused on the development of assessable design tools for architects and engineers and the application of natural ventilation to commercial buildings. Research also includes application of sustainable practices to the MIT campus; he serves as co-chair the MIT Campus Energy Task Force. Among his awards are the Melville Medal of ASME, the Robert T. Knapp Award and the ASME Heat Transfer Memorial Award. He is a fellow of ASME and ASHRAE. He is the author of over 250 publications and three books.

20. What changes has ASHRAE made that you support?

The Net Zero Energy push and the 2030 challenge as well as the state energy code are all significant items of the last ten years that have really made us revisit energy and insulation.



MEMBERSHIP PROMOTION

By: Dan Carington

Hello Members, Happy New Year. I hope everyone had a great holiday! January 10, 2017 is Membership Promotion Night at the Embassy Suites in Waltham. Main topic is on Steam Design by Kevin Foley, tech session is on Montreal Protocol Refrigeration Updates by Ryan Geister. Bring a nonmember and have them experience the Boston ASHRAE member hospitality.

Anyone interested in becoming a member will be able to find membership pamphlets at the sign in table. You can also join ASHRAE Boston Chapter via the web by going to <https://www.ashrae.org/membership-conferences/join-now/how-to-join-ashrae>, see membership grade for your qualification to determine which grade you qualify for. You can join online or print out your application and mail it in. I highly recommend filling out your application online.

Please help me welcome our new members since December by giving them a warm welcome;

Mr Scott Harkins	Mr Paul DeViller	Mr Josh I Gardner	Mr Michael D Ste. Marie
Mr Michael A Ragan	Mr Robert Jones	Mr Brian Keenan	Mr Christopher Terranova
Mr Heramb H Tilak	Mr Mayur K Garudi	Mr Andrew Dinon	Mr Pierry Etienne
Mr Jason Kalweit	Mr Jeff Simeon	Mr Jorge Mendoza	

Welcome, we are so looking forward to seeing you at our next Boston ASHRAE event. Any comments or questions, please feel free to contact me at dcarington@brplusa.com

Presidential Award of Excellence Boston Chapter - 2016-2017

Chapter Members	Membership Promotion Points	Student Activities Points	Research Promotion Points	History Points	Chapter Organization Points	Chapter Technology Transfer Points	Grassroots Government Affairs Points	Chapter PAOE Point Totals
1107	745	560	410	440	825	125	50	3155

Employment Ads

ASHRAE Boston Chapter – Employment Ads

The NorthEastAire is published monthly, September through June. It is posted on the Chapter website at www.ashraeboston.org. A link is sent each month to all members of the Chapter, currently over 1000.

Newsletter Rate: \$400 for 1/2 page, \$800 for full page

Website Rate: \$300 per calendar month

Format: Word format, company logos in .jpg or .gif

Deadline for February Newsletter: January 20, 2016

Any questions, please contact Deanna Adkison, Newsletter Editor at 617-535-8236 or northeastaire@gmail.com



By: Steve Rosen

Grassroots Government Advocacy Committee.

Federal Activities

DOE Withdraws Rule on Commercial Packaged Boilers

The U.S. Department of Energy (DOE) is withdrawing its final rule to amend its test procedure for commercial packaged boilers which published in the *Federal Register* on Thursday, November 10, 2016. The final rule published on November 10, 2016 contained errors. Therefore, DOE is withdrawing the final rule in its entirety and will republish the final rule amending its test procedure for commercial packaged boilers. Among other amendments, the final rule incorporates by reference certain sections of the American National Standards Institute (ANSI)/ Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Standard 1500, "2015 Standard for Performance Rating of Commercial Space Heating Boilers," provides an optional field test for commercial packaged boilers with rated input greater than 5,000,000 Btu/h, and modifies the inlet water temperatures during tests of hot water commercial packaged boilers. Because the November 10, 2016, rule contained errors, DOE is withdrawing the final rule in its entirety and will republish the final rule amending its test procedure for commercial packaged boilers.

DOE Finalizes Energy-Efficiency Standards for Ceiling Fans

The U.S. Department of Energy has finalized new standards for ceiling fan energy efficiency. DOE says the new standards will reduce the energy use of ceiling fans by about 26%, resulting in national savings of about 200 billion kWh of energy over 30 years. DOE estimates that the purchase price of residential ceiling fans will increase by only about \$11 with

the new standards and that the additional cost will be covered by energy bill savings in less than two years.

DOE Extends Public Comment Period on Proposed Residential Furnace Rules

The U.S. Department of Energy (DOE) announces the reopening of the public comment period for submitting comments and data on the NOPR or any other aspect of the rulemaking for residential furnaces. Originally published as a supplemental notice of proposed rulemaking (SNOPR) and announcement of public meeting pertaining to proposed energy conservation standards for residential furnaces in the *Federal Register*, the notice provided an opportunity for submitting written comments, data, and information by November 22, 2016. The comment period has now been reopened until January 6, 2017.

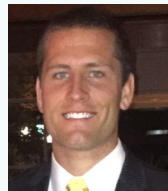
GGAC Regional and Chapter Activities

EWeek 2017

Engineers Week (EWeek) 2017 will be held February 19-25, 2017. This year as in past years, GGAC is encouraging our Chapters to obtain proclamations from elected officials (Mayors, Legislatures, Governors, Provincial officials, etc.). Information, draft proclamations and cover letters will be posted soon on the GGAC website. Mark your calendars now and watch for more details soon.

Your Boston GGAC committee welcomes your articles and event suggestions!

Please contact Christine Reinders, Stacie Suh or Steve Rosen.
stacie@stebbinsduffy.com creinders@CANNONDESIGN.COM
srosen@RDKEngineers.com



Webmaster's Notes

By: Kevin Doty

Did you know? Besides registering and paying for monthly meetings, you can also pay for a corporate sponsorship, newsletter & website job postings, product guide pages, and more – all through the website.

Please make sure to add admin@ashraeboston.org to your "safe sender" list to prevent emails from going to your spam folder.

Please feel free to send comments and suggestions to coo1web@ashrae.net

RDK ENGINEERS

Proud to be a sponsor of the ASHRAE Boston Chapter

Mechanical

Electrical

Plumbing

Fire Protection

Technology Design

Commissioning

Sustainability



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Attention Advertiser –

Please update your product line card and product guide list for the 2017 ASHRAE Product Guide that is coming out in April! The Product Guide provides a cross referenced list of local engineers, representatives, wholesalers, contractors, and affiliated organizations engaged in the HVAC field. The annual cost for a single-page product line card is \$100.

If you are interested and have not yet received an email regarding the 2017 ASHRAE Boston Product Guide, please reach out to co01sa.ashrae.net!



Dec 5, 2016

Contact: Jodi Scott

Public Relations

678-539-1140

jscott@ashrae.org

ATLANTA – More than 160 refrigerants are maintained under ASHRAE’s refrigerant classification standard, and that list continues to grow as the industry’s need for new refrigerants increases.

A review of the new classes of lower global-warming potential (GWP) refrigerants within the context of legacy refrigerants and the forces that drive the development of new refrigerants is the focus of a new educational course from ASHRAE Learning Institute (ALI).

The course is being introduced at the ASHRAE 2017 Winter Conference, Jan. 28-Feb. 1, at Caesars Palace, Las Vegas, with ASHRAE co-sponsored AHR Expo being held Jan. 30-Feb. 1 at the Las Vegas Convention Center.

“ASHRAE-Classified Refrigerants to Meet Society’s Changing Needs” takes place Jan. 29. It is offered by ALI as one of 20 courses at the Conference. For more information or to register, visit www.ashrae.org/lasvegascourses.

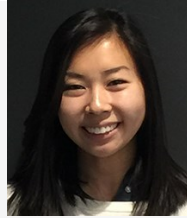
ANSI/ASHRAE Standard 34, *Designation and Safety Classification of Refrigerants*, maintains a list of refrigerants with a standardized system of assigned refrigerant numbers and well-defined safety classifications, including toxicity and flammability ratings. This ever growing list of refrigerants currently includes 161 chemicals and chemical blends that have been proposed for use as refrigerants.

“There has long been use of flammable and toxic materials as refrigerants, such as propane and ammonia, but their use has been restricted to appropriately designed industrial systems, as prescribed in ANSI/ASHRAE Standard 15, *Safety Standard for Refrigeration Systems*, and other safe use guidelines,” Thomas Leck, Ph.D., course instructor, said. “Currently, concern about global climate change is driving the cooling industry to consider new classes of chemicals to be used as refrigerants. With the new chemicals are new safety classifications for flammability, including ‘Class 2L.’”

Leck is a chemist who spent the majority of his working career with the DuPont and Chemours companies.

The course explains how the changing needs of society are creating requirements for new refrigerants to be developed and used. The course also explains the new safety classifications that are being proposed and some of the ramifications of these new classifications.

“The refrigerant industry, more than any other industries, has been driven by changing needs and understanding of environmental and product safety issues,” Leck said. “Parties who are passionate about issues such as stratospheric ozone protection and global climate change have influenced manufacturers and regulators to create new products and new regulations around properties of refrigerants and how those refrigerants can be used. Sometimes there are consequences and compromises that must be considered. This short course attempts to explain some of these issues and how the resulting changes impact the cooling industry and people who work in this industry.”



STUDENT ACTIVITIES

By: Yuka Narisako

Season’s greetings! I hope all of our Student Members had a successful finals week and a delightful holiday with good food, family, friends, and plentiful relaxation time. I’m looking forward to the month of January, as the annual ASHRAE Winter Conference will be held in Las Vegas. I always looked forward to the Winter Conference as a student member, and hope that as many student members from the Boston Chapter can attend this year.

Please let me know if your Student Branch has not received your Student Branch Support Check yet. These funds are to be used for students to participate and engage in ASHRAE and the HVAC&R industry (including sending your students to the Winter Conference!)

I hope to see our 21+ student members at the ASHRAE YEA event at the Good Life in Boston on Thursday, January 12. It’ll be a great networking opportunity for students approaching graduation who may be interested in the different occupations within the HVAC&R industry.

Last but not least, I encourage our student members to take advantage of the generous scholarships offered to student members through ASHRAE, both at a society level and a Boston Chapter level. Please refer to the Student Activities page on the ASHRAE Boston Chapter website for [application information](#) regarding the Cheryl Rossini Future Engineers Scholarship Application. The Society also has 33 scholarships available for the 2017-2018 academic year, and are encouraged to apply at www.ashrae.org/scholarships.

Please feel free to reach out to me at coo1sa@ashrae.net with any questions you might have.

ASHRAE BOSTON UPCOMING EVENTS

Visit <https://ashraeboston30.wildapricot.org/resources/Documents/Save%20the%20Date%205.pdf> for more information.

January Meeting

When: January 10, 2017
Where: Embassy Suites, Waltham

ASHRAE YEA Social Event

When: January 12, 2017 7:00-9:00pm
Where: Good Life Boston

February Meeting

When: February 15, 2017
Where: Metro Meeting Centers

March Meeting

When: March 1, 2017
Where: TBD

BOSTON AREA UPCOMING EVENTS

AFE Boston Chapter 33
www.afechapter33.org

IFMA Boston Chapter
www.ifmaboston.org

BOMA Boston Chapter
<http://www.gbreb.com/boma/>

Sustainable Performance Institute
<http://www.sustainable-performance.org/>

AFE Chapter 74-Worcester Area-Central MA
www.afe74.org

USGBC Massachusetts Chapter
www.usgbcma.org

AEE New England Chapter
www.aeenewengland.org/

IBPSA Boston Chapter
<http://ibpsa-boston.com/>



RESEARCH PROMOTION

By: Stacie Suh

Victaulic
RST Thermal
Trane
R. T. Forbes Company

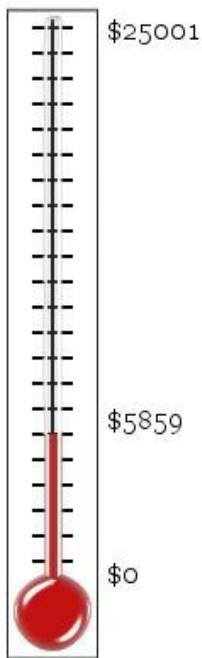
Dear ASHRAE Members,

As always, I would like to extend my sincerest thanks to you for your support of ASHRAE Research last year. It's because of your support that we were able to fund more than \$14 Million dollars' worth of research. More than 80 research projects worldwide received support from ASHRAE because of your investment. We've begun the 2016-2017 Campaign already and I hope we can once again count on your support of ASHRAE Research this year. The Boston Chapter goal for 2016-2017 is \$25,001, Region I goal \$188,000 and society goal is \$2.6 million. We have raised \$5859 so far.

As always, you may also make your investment online at www.ashrae.org/donate. If you are interested in donating in other method than online, please let me know. Your contribution will automatically go toward helping the Boston Chapter reach our RP goal for 2016-2017.

If you'd like a list of research projects being conducted in the region or about specific topics, please let me know.

Thank you to following Donors:



Dr Benjamin S Weil
Mr Robert J Persechini
Mr Robert J Barstow, PE
Mr Warren E Hudson
Kirschner Associates Inc
Ms Stacie Suh
Mr William K Tang
Ms Deanna Jean Adkison
Mr Michael P Gilroy
Mr Mark Leonard
Ms Darcy A Carbone
Mr Lance Brown
Mr Jeffrey Zajac
Boston ASHRAE Chapter
Mr John M Swift, Jr
Mr Daniel P J Carington
Mr John F Coffey, Jr
Mr Steven J Lappin
Mr Edward Dullea
Mr Anthony H Castelline
Victory Heating & Air Conditioning

Ms Christine Reinders-Caron
TNZ Energy Consulting
Mr James E Armstrong
Mr Stephen Lahti
RECCO
Green Footprints Commissioning
Mr Steven L Rosen
Mr Karl R Hudson
Mr Richard D McGinley
Daikin
Leonhardt Company Inc
BR+A Consulting Engineers
HTS Engineering Ltd

Here are few links that you might find useful.

- Also you can find more information on resource promotion, please go to <https://www.ashrae.org/standards-research-technology/ashrae-rp>.
- If you are intersted in important dates and deadlines for research projects please click on <https://www.ashrae.org/standards-research-technology/research>.
- These Research Project Final Reports document the results of the research project, and are approved by the sponsoring Technical Committee. ASHRAE members have free access through the [Members-Only Research Projects Final Reports site](#).
- If you are interested in submitting solicited research project, go to <https://www.ashrae.org/standards-research-technology/research>.
- If you are interested in donating to ASHRAE Resource, go to www.ashrae.org/donate

Again, Thank you for your continued support of these vital projects – it's greatly appreciated. Please contact me with any questions at stacie.suh@dxseng.com.

Stacie Suh /RP Chair 2016-2017
[Email](#)

FREE SUNDAY RIVER & SUGARLOAF DISCOUNT SKI VOUCHERS, SAVE \$10 PER TICKET

The Boston Chapter is participating in the Sunday River/Sugarloaf corporate voucher program again this year. Each voucher entitles you to purchase up to four discounted lift tickets at either ski resort by presenting an ASHRAE membership card, picture ID, and voucher. The discount is \$10 per ticket for all age groups. Contact Ed Waldman, ewaldman1@verizon.net, and the voucher will be e-mailed to you. You can make as many copies as you like.. There is no charge for the vouchers and there are no blackout dates. Complete rules below:

How To Use Vouchers

1. Bring your corporate voucher to any participating resorts ticket window.
2. Present your voucher, photo ID, and valid ASHRAE membership card to the ticket seller. In the absence of the individual member, immediate family members defined as spouse and children, must present some form of ASHRAE identification, plus a photo ID in order to receive the discount.

Each person expecting the corporate pricing must be present with the corporate voucher holder at the time of ticket purchase. The ticket seller will take the voucher in exchange for up to 4 lift tickets.

Winter Season 2016/2017 Corporate Voucher

Present your **Corporate Voucher**, photo ID (driver's license, etc.) and valid company ID (company ID, business card, pay check stub, letter on company letterhead) to the ticket seller. In the absence of the individual directly employed by or member of the participating company, immediate family members, defined as spouse and children, must present the **Corporate Voucher**, some form of corporate identification (business card, pay stub, or letter from employer), plus a photo ID. Young children do not need a photo ID to receive the corporate discount.

Corporate Program Pricing: **\$10 OFF**



**American Society of Heating,
Refrigeration & A.C.
Engineers**



Corporate Voucher is valid for 4 ticket vouchers.

Boyer Reward Points are given to the company participating in the corporate program and cannot be redeemed by the individual participants

<http://sugarloaf.com/the-mountain/daily-report>

<http://www.sundayriver.com/TheMountain/MountainReport/index.asp>

Smart Grid Standard Adopted by International Organization for Standardization

ATLANTA – A smart grid standard published earlier this year by ASHRAE and the *National Electrical Manufacturers Association* (NEMA) has been approved as an International Organization for Standardization (ISO) standard.

ANSI/ASHRAE/NEMA Standard 201-2016, *Facility Smart Grid Information Model (FSGIM)*, provides a common basis for electrical energy consumers to describe, manage and communicate about electrical energy consumptions and forecasts.

On Nov. 17, ISO/TC 205 Building Environment Design unanimously approved the FSGIM standard in a draft international standard ballot. Because there were no negative votes and no comments to resolve, the standard can move directly to the publication process without an additional international vote, according to Standard 201 committee chair Steve Bushby. The standard will soon be published as ISO 17800.

“This approval is important given that the standard provides one piece of a larger ecosystem of standards that support the global transformation of the current electric grid into a new smart grid,” Bushby said. “This grid will support the two-way flow of both information and electricity as well as widespread use of distributed, renewable generation sources.”

The FSGIM standard builds upon the work of the Smart Grid Interoperability Panel (SGIP) Priority Action Plan 17 and several other smart grid standards, including the standards that support Green Button. The FSGIM standard defines key information that must be shared between electricity providers and electricity consumers along with internal operational and control information needed to control loads and generation sources in facilities (from homes to manufacturing plants) in cooperation with a smart grid.

The FSGIM is a seed standard intended to guide the evolution of control technology specific standards, such as ANSI/ASHRAE Standard 135, *BACnet – A Data Communication Protocol for Building Automation and Control Networks*, for use in various locations.

Standard 201 joins three other ASHRAE standards that have been adopted by ISO. Two of these standards, both direct adoptions, ISO 16484-5, a direct adoption of Standard 135, and ISO 16484-6, ANSI/ASHRAE Standard 135.1, *Method of Test for Conformance to BACnet*, are already being modified to include new features that would support the functionality defined in FSGIM.

Standard 201 is part of ASHRAE’s efforts to support SGIP in accelerating the development of interoperability for a nationwide smart electric power grid.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 55,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow’s built environment today. More information can be found at www.ashrae.org/news.

Since being named in the Energy Independence and Security Act of 2007 as a participant in federal efforts to enhance the productivity, efficiency, and sustainability of the electric grid NEMA and its members are leading the way in Smart Grid Technologies by encouraging investment in the national electricity grid, research and development, and developing new product standards. This was first evidenced when NEMA developed a standard describing requirements for Smart Meter upgradeability as well as a recent standard that contains testing and certification recommendations and best practices that promote the introduction of interoperable products in the marketplace.

NEMA represents nearly 400 electrical, medical imaging, and radiation therapy manufacturers at the forefront of electrical safety, reliability, resilience, efficiency, and energy security. NEMA’s combined industries account for more than 400,000 American jobs and more than 7,000 facilities across the U.S. Domestic production exceeds \$117 billion per year.

SGIP is an industry consortium representing a cross-section of the energy ecosystem focusing on accelerating grid modernization and the energy Internet of Things through policy, education, and promotion of interoperability and standards to empower customers and enable a sustainable energy future. SGIP’s members are utilities, vendors, investment institutions, industry associations, regulators, government entities, national labs, services providers, and universities. A nonprofit organization, SGIP drives change through a consensus process. Visit www.sgip.org. Follow SGIP on [LinkedIn](#) and [Twitter](#).

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2016-2017 Meeting Schedule

Date	Main Meeting/ Tech Session	Speaker	PDH Credits	Location/ Special Night
September	Lessons Learned	Steve Tafone	1.0	Embassy Suites 550 Winter St. Waltham
Wednesday September 21, 2016	N/A		N/A	Research Promotion/Membership Promotion
October	Net Zero Energy Building	Conor McGuire	1.0	CBRE Amenity Center 100 High St. Boston
Tuesday October 18, 2016	Tech Session: Coil Freeze Protection	Cooney Coil	TBD	Past Presidents & History
November	Tour of Bruins' Training Facility		-	Warriors Ice Arena 80 Guest St. Boston
Tuesday November 8, 2016	N/A	N/A	N/A	Student Activities/ Young Engineers in ASHRAE/Women in ASHRAE
December	Solar Heating - Hosted by ASPE	TBD	TBD	Lantana 43 Scanlon Dr. Randolph
Tuesday December 13, 2016	Tech Session: TBD	TBD	TBD	Joint Meeting with ASPE
January	Steam Design	Kevin Foley	TBD	Embassy Suites 550 Winter St. Waltham
Tuesday January 10, 2017	Tech Session: Montreal Protocol Refrigerant Updates	Trane	TBD	Research Promotion/Membership Promotion
February	Space Pressurization	Jim Coogan	TBD	Metro Meeting Centers 101 Federal St. Boston
Wednesday February 15, 2017	Tech Session: Proper Venting of Fuel Fired Appliances	Frank I Rounds	TBD	Joint Meeting with I2SL
March	Demand Reduction - Hosted by AEE	TBD	TBD	TBD
Wednesday March 1, 2017	Tech Session: TBD	TBD	TBD	Joint Meeting with AEE
April	Attract, Retain & Promote Women in the HVAC Industry	Ginger Scoggins	TBD	Metro Meeting Centers 101 Federal St. Boston
Tuesday April 11, 2017	Tech Session: Back to Basics - Psychometrics	Ginger Scoggins	TBD	Student Activities/Young Engineers in ASHRA/Women in ASHRAE
May	Installation of Officers		N/A	TBD
Tuesday May 9, 2017				
June	Golf Outing	Jim Liston	N/A	Halifax Country Club, Halifax, MA
Monday June 5, 2017				Research Promotion

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